

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05465

Farm name: Lowe, Francis and Nancy Operator Well No.: Wagner Unit 1H

LOCATION: Elevation: 1214' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 8777' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 597' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 55#	534'	534'	742 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2438'	2438'	993 Cu. Ft. Class A
Date Permit Issued: 09/08/2010	5-1/2" 20#	13,536'	13,536'	3338 Cu. Ft. Class H
Date Well Work Commenced: 1/6/2011		Top	Bottom	
Date Well Work Completed: 5/18/2011	Cmt Plug	6355'	6555'	100 Cu. Ft. Class A
Verbal Plugging: N/A				
Date Permission granted on: N/A	2-3/8" 4.7#	7019'		
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7067' TVD (deepest point drilled)				
Total Measured Depth (ft): 13,537' MD, 7067' TVD (BHL)				
Fresh Water Depth (ft.): 40'	*Due to air drilling, Antero was unable to identify accurate salt water and coal depths for reporting.			
Salt Water Depth (ft.): *None available				
Is coal being mined in area (N/Y)? N			RECEIVED Office of Oil & Gas	
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

SEP 11 2012

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6894' TVD (Top)

Gas: Initial open flow MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 8031 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3200 psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

WV Department of
Environmental Protection

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

John Kroger
Signature

9/4/12
Date

Were core samples taken? Yes _____ No **X** Were cuttings caught during drilling? Yes **X** No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes – Cement Bond Log/Gamma Ray/CCL Log
Compensated Neutron/Photo Density/Dual Laterolog, Gamma Ray/Array Induction/Temperature

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7117' – 13,468' MD

Frac'd w/ 5,000 gals 15% HCL Acid,110,258 bbls Slick Water carrying 444,600# 100 mesh, 2,057,500# 40/70 and 1,217,800# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			
Big Lime	1453'		1972'
Fifty Foot S.S.	1973		2115
Gordon	2116		2382
Fifth Sandstone	2383		2435
Bayard	2436		3089
Speechley	3090		3305
Balltown	3306		3815
Bradford	3816		4482
Benson	4483		4786
Alexander	4787		5013
Elk	5014		5541
Rhinestreet	5542		6225
Sycamore	6226		6303
Sonyea	6304		6500
Middlesex	6501		6567
West River	6577		6632
Genundewa	6633		6661
Burket	6662		6689
Tully	6690		6814
Hamilton	6815		6893
Marcellus	6894		7040' TVD

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05466

Farm name: Lowe, Francis and Nancy Operator Well No.: Wagner Unit 2H

LOCATION: Elevation: 1214' Quadrangle: West Millford

District: Union County: Harrison
Latitude: 8762' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 597' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

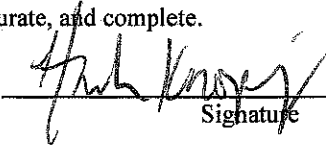
Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 55#	525'	525'	728 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2462'	2462'	1002 Cu. Ft. Class A
Date Permit Issued: 09/08/2010	5-1/2" 20#	13,997'	13,997'	3464 Cu. Ft. Class H
Date Well Work Commenced: 1/12/2011				
Date Well Work Completed: 5/31/2011	2-3/8" 4.7#	7183'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7050' TVD (deepest point drilled)				
Total Measured Depth (ft): 13,997' MD, 7050' TVD (BHL)				
Fresh Water Depth (ft.): *None available	*Due to air drilling, Antero was unable to identify accurate fresh water and coal depths for reporting.			
Salt Water Depth (ft.): 2494'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6872' TVD (Top)
Gas: Initial open flow _____ MCF/d Oil: Initial open flow N/A Bbl/d
Final open flow 13,034 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3200 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

 Signature

9/4/12
Date

Were core samples taken? Yes _____ No **X** Were cuttings caught during drilling? Yes _____ No **X**

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list **Yes – Cement Bond Log/Gamma Ray/CCL Log**
This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Wagner Unit 1H API# 47-033-05465). Please reference wireline logs submitted with Form WR-35 for Wagner Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7308' - 13,930' MD
Frac'd w/ 5,750 gals 15% HCL Acid, 114,292 bbls Slick Water carrying 471,100# 100 mesh, 2,260,300# 40/70 and 1,343,800# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): **N/A**

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>Bottom Depth</u>
<u>Surface:</u>		
**Sycamore	6,204'	6,669'
Tully	6,670'	6,791'
Hamilton	6,792'	6,871'
Marcellus	6,872'	7,050' TVD

**Antero only runs wireline logs on the first well on a multi-well pad (Wagner Unit 1H). Since this is a subsequent well, our logging started at the top of the Sycamore. Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation tops submitted on Form WR-35 for the Wagner Unit 1H (API# 47-033-05465).

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05467

Farm name: Lowe, Francis and Nancy Operator Well No.: Wagner Unit 3H

LOCATION: Elevation: 1214' Quadrangle: West Milford

District: Union County: Harrison
Latitude: 8762' Feet South of 39 Deg. 15 Min. 00 Sec.
Longitude 607' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 68#	535'	535'	742 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2468'	2468'	1005 Cu. Ft. Class A
Date Permit Issued: 09/08/2010	5-1/2" 20#	13,960'	13,960'	3450 Cu. Ft. Class H
Date Well Work Commenced: 3/25/2011				
Date Well Work Completed: 5/22/2011	2-3/8" 4.7#	7281'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7031' TVD (deepest point drilled)				
Total Measured Depth (ft): 13,960' MD, 7031' TVD (BHL)				
Fresh Water Depth (ft.): *None available	*Due to air drilling, Antero was unable to obtain accurate fresh water, salt water and coal depths for reporting.			
Salt Water Depth (ft.): *None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

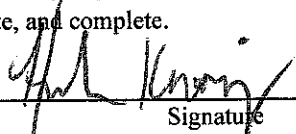
Producing formation Marcellus Pay zone depth (ft) 6864' TVD (Top)

Gas: Initial open flow _____ MCF/d Oil: Initial open flow N/A E
Final open flow 10,485 MCF/d Final open flow N/A Bbl/d
Time of open flow between initial and final tests N/A Hours
Static rock Pressure 3200 psig (surface pressure) after _____ Hours

Second producing formation _____ Pay zone depth (ft) _____

Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

9/4/12
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes – Cement Bond Log/Gamma Ray/CCL Log
This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Wagner Unit 1H API# 47-033-05465). Please reference wireline logs submitted with Form WR-35 for Wagner Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7418' - 13,898' MD
Frac'd w/ 5,000 gals 15% HCL Acid, 113,342 bbls Slick Water carrying 378,700# 100 mesh, 2,383,200# 40/70 and 1,392,600# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	Bottom Depth
Surface:		
**Tully	6,664'	6,785'
Hamilton	6,786'	6,863'
Marcellus	6,864'	7,031' TVD

**Antero only runs wireline logs on the first well on a multi-well pad (Wagner Unit 1H). Since this is a subsequent well, our logging started at the top of the Tully. Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation tops submitted on Form WR-35 for the Wagner Unit 1H (API# 47-033-05465).

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05506

Farm name: J.L. Morris & Mike Ross, Inc. Operator Well No.: Richman Unit 2H

LOCATION: Elevation: 1169' Quadrangle: Wolf Summit

District: Coal County: Harrison
Latitude: 3584' Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude: 10,931' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 68#	489'	489'	679 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2554'	2554'	1040 Cu. Ft. Class A
Date Permit Issued: 01/28/2011	5-1/2" 20#	13,610'	13,610'	3331 Cu. Ft. Class H
Date Well Work Commenced: 6/8/2011				
Date Well Work Completed: 10/26/2011	2-3/8" 4.7#			
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7086' TVD (Deepest point drilled)				
Total Measured Depth (ft): 13,610' MD, 7,043' TVD (BHL)				
Fresh Water Depth (ft.): *None available	*Due to air drilling, Antero was unable to identify accurate fresh water and coal depths for reporting.			
Salt Water Depth (ft.): 1137'				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,046' TVD (Top)

Gas: Initial open flow ----- MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 1,383 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3300 psig (surface pressure) after ----- Hours

Second producing formation ----- Pay zone depth (ft) -----

Gas: Initial open flow ----- MCF/d Oil: Initial open flow ----- Bbl/d

Final open flow ----- MCF/d Final open flow ----- Bbl/d

Time of open flow between initial and final tests ----- Hours

Static rock Pressure ----- psig (surface pressure) after ----- Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

J. H. Knoppy
Signature

9/4/12
Date

Were core samples taken? Yes No **X** Were cuttings caught during drilling? Yes No **X**

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- Cement Bond Log/Gamma Ray/CCL Log
This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Reynolds Unit 1H API# 47-033-05451). Please reference wireline logs submitted with Form WR-35 for Reynolds Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7321' - 13,490' MD
Frac'd w/ 4,750 gals 15% HCL Acid, 93,309 bbls Slick Water carrying 445,000# 100 mesh, 1,985,800# 40/70 and 1,263,500# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: <u>Surface:</u>	Top Depth	/	Bottom Depth
**Sycamore	6,365'		6,833'
Tully	6,834'		6,961'
Hamilton	6,962'		7,045'
Marcellus	7,046'		7,086' TVD

**Antero only runs wireline logs on the first well on a multi-well pad (Reynolds Unit 1H). Since this is a subsequent well, our logging started at the top of the Sycamore. Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation tops submitted on Form WR-35 for the Reynolds Unit 1H (API# 47-033-05451).

WR-35
Rev (9-11)

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05538

Farm name: Posey, Larry and Martha

Operator Well No.: Colly Unit 1H

LOCATION: Elevation: 1107'

Quadrangle: Clarksburg

RECEIVED
Office of Oil & Gas

District: Coal

County: Harrison

Latitude: 11.845 Feet South of 30 Deg. 20 Min. 00 Sec.

Longitude 10.411 Feet West of 80 Deg. 20 Min. 00 Sec.

SEP 18 2012

Company: Antero Resources Appalachian Corp

WV Department of
Environmental Protection

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
1625 17th Street Denver, CO 80202	20" 94#	43'	43'	41 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 54.5#	485'	485'	674 Cu. Ft. Class A
Inspector: Tristan Jenkins	10.8" 36#	2479'	2479'	1009 Cu. Ft. Class A
Date Permit Issued: 04/19/2011	5-1/2" 20#	15,096'	15,096'	3767 Cu. Ft. Class H
Date Well Work Commenced: 07/01/2011				
Date Well Work Completed: 03/10/2012	2-3/8" 4.7#	7078'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,018' TVD (Deepest point drilled)				
Total Measured Depth (ft): 15,110' MD, 6,957' TVD (BHL)				
Fresh Water Depth (ft.): 485'	*Due to air drilling, Antero was unable to identify accurate salt water and coal depths for reporting.			
Salt Water Depth (ft.): *None Available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None Available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 6,987' TVD (Top)

Gas: Initial open flow MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 8,734 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3300 psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

9/4/2012
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes _____ No X

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes – Cement Bond Log/Gamma Ray/CCL Log,
Compensated Neutron/Photo Density/Dual Laterolog, Gamma Ray/Array Induction/Temperature

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7,340'- 15,032' MD

Frac'd w/ 11,500 gals 15% HCL Acid, 172,251 bbls Slick Water carrying 813,900# 100 mesh, 3,756,500# 40/70 and 2,403,100# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			
Big Lime-	1,420'		1,517'
Big Injun-	1,518'		1,879'
Gantz Sand-	1,880'		1,970'
Fifty Foot Sandstone-	1,971'		2,140'
Gordon-	2,141'		2,408'
Fifth Sandstone-	2,409'		3,097'
Speechley-	3,098'		3,300'
Balltown-	3,301'		3,782'
Bradford-	3,783'		4,429'
Benson-	4,430'		4,738'
Alexander-	4,739'		4,941'
Elk-	4,942'		5,503'
Rhinestreet-	5,504'		6,750'
Burket -	6,751'		6,776'
Tully Ls-	6,777'		6,900'
Hamilton -	6,901'		6,986'
Marcellus -	6,987'		6,998'
Purcell-	6,999'		7,016'
Cherry Valley Ls-	7,017'		7,016'
Onondaga Ls-	7,000'		7,018'

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05539

Farm name: Posey, Larry and Martha Operator Well No.: Colly Unit 2H

LOCATION: Elevation: 1107' Quadrangle: Clarksburg

District: Coal County: Harrison
Latitude: 11.850 Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 10.402 Feet West of 80 Deg. 20 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	42'	42'	40 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 54.5#	465'	465'	692 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2447'	2447'	1016 Cu. Ft. Class A
Date Permit Issued: 04/19/2011	5-1/2" 20#	15,084'	15,084'	3761 Cu. Ft. Class H
Date Well Work Commenced: 07/02/2011				
Date Well Work Completed: 03/16/2012	2-3/8" 4.7#	7146'		
Verbal Plugging: N/A				
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,048' TVD (Deepest point drilled)				
Total Measured Depth (ft): 15,084' MD, 6,952' TVD (BHL)				
Fresh Water Depth (ft.): *None available				
Salt Water Depth (ft.): *None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

RECEIVED
Office of Oil & Gas

SEP 11 2012

WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,019' TVD (Top)

Gas: Initial open flow --- MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 11,186 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3300 psig (surface pressure) after --- Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow --- MCF/d Oil: Initial open flow --- Bbl/d

Final open flow --- MCF/d Final open flow --- Bbl/d

Time of open flow between initial and final tests --- Hours

Static rock Pressure --- psig (surface pressure) after --- Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Frank Kropp
Signature

9/4/2012
Date

Were core samples taken? Yes No ☒ Were cuttings caught during drilling? Yes No ☒

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- Cement Bond Log/Gamma Ray/CCL Log
This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Colly Unit 1H API# 47-033-05538). Please reference wireline logs submitted with Form WR-35 for Colly Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7311' - 15,016' MD
Frac'd w/ 11,500 gals 15% HCL Acid, 171,512 bbls Slick Water carrying 824,000# 100 mesh, 3,660,800# 40/70 and 2,330,700# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
**Sycamore	6,235'		6,792'
Tully	6,793'		6,925'
Hamilton	6,926'		7,018'
Marcellus	7,019'		7,048' TVD

**Antero only runs wireline logs on the first well on a multi-well pad (Colly Unit 1H). Since this is a subsequent well, our logging started at the top of the Sycamore. Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation tops submitted on Form WR-35 for the Colly Unit 1H (API# 47-033-05538).

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 9/4/2012
API #: 47-033-05550

Farm name: I.L. Morris & Mike Ross, Inc.

Operator Well No.: Richman Unit 1H

LOCATION: Elevation: 1169'

Quadrangle: Wolf Summit

District: Coal County: Harrison
Latitude: 3594' Feet South of 39 Deg. 20 Min. 00 Sec.
Longitude 10,929' Feet West of 80 Deg. 25 Min. 00 Sec.

Company: Antero Resources Appalachian Corp

Address: 1625 17th Street	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Denver, CO 80202	20" 94#	40'	40'	38 Cu. Ft. Class A
Agent: CT Corporation System	13-3/8" 68#	474'	474'	658 Cu. Ft. Class A
Inspector: Tristan Jenkins	9-5/8" 36#	2511'	2511'	1440 Cu. Ft. Class A
Date Permit Issued: 05/24/2011	4" 11.6#	7003'	7003'	303 Cu. Ft. Class H
Date Well Work Commenced: 6/4/2011	5-1/2" 20#	13,758'	13,758'	3382 Cu. Ft. Class H
Date Well Work Completed: 4/17/2012				
Verbal Plugging: N/A	2-3/8" 4.7#	7170'		
Date Permission granted on: N/A				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7,102' TVD (Deepest point drilled)				
Total Measured Depth (ft): 13,758' MD, 7,045' TVD (BHL)				
Fresh Water Depth (ft.): 980'	*Due to air drilling, Antero was unable to identify accurate salt water and coal depths for reporting.			
Salt Water Depth (ft.): *None available				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): *None available				
Void(s) encountered (N/Y) Depth(s) N, N/A				

RECEIVED
Office of Oil & Gas

SEP 11 2012

WV Department of
Environmental Protection

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,056' TVD (Top)

Gas: Initial open flow MCF/d Oil: Initial open flow N/A Bbl/d

Final open flow 672 MCF/d Final open flow N/A Bbl/d

Time of open flow between initial and final tests N/A Hours

Static rock Pressure 3300 psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)

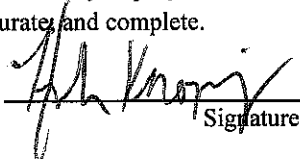
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

9/4/12
Date

Were core samples taken? Yes _____ No **X** Were cuttings caught during drilling? Yes **X** No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes- Cement Bond Log/Gamma Ray/CCL Log
This is a subsequent well. Antero only runs wireline logs on the first well on a multi-pad (Reynolds Unit 1H API# 47-033-05451). Please reference wireline logs submitted with Form WR-35 for Reynolds Unit 1H.

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: 7282' - 13,640' MD
Frac'd w/ 5,000 gals 15% HCL Acid, 86,865 bbls Slick Water carrying 29,900# 100 mesh, 1,833,041# 40/70 and 86,000# 20/40 sand.

Plug Back Details Including Plug Type and Depth(s): **N/A**

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
**Tully	6,852'		6,977'
Hamilton	6,978'		7,055'
Marcellus	7,056'		7,102 TVD

**Antero only runs wireline logs on the first well on a multi-well pad (Reynolds Unit 1H). Since this is a subsequent well, our logging started at the top of the Tully. Therefore, we are unable to accurately identify formation tops from surface. Please reference the additional formation tops submitted on Form WR-35 for the Reynolds Unit 1H (API# 47-033-05451).

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 8, 2012
API #: 47-095-02021

Farm name: Roger Weese Operator Well No.: Everett Weese 1107

LOCATION: Elevation: 767' Quadrangle: Shirley

District: McElroy County: Tyler
Latitude: 39.424081 Feet South of 39 Deg. 25 Min. 29.69 Sec.
Longitude -80.80935 Feet West of 80 Deg. 48 Min. 33.66 Sec.

Company: Triad Hunter, LLC

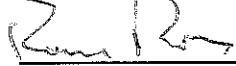
Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430 Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	80'	80'	
Inspector: Joe Taylor	13 3/8"	442.1'	442.1'	402 cu. ft.
Date Permit Issued: 05/04/2011	9 5/8"	2783.47"	2783.47'	1292 cu. ft.
Date Well Work Commenced: 09/03/2011	5 1/2"	12130.18'	12130.18'	3361.15 cu. ft.
Date Well Work Completed: 12/18/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6370'				
Total Measured Depth (ft): 12150'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 740'-741', 1055'-1057', 1159'-1160', 1202'-1204', 1218'-1220', 1245'-1248'	1358'-1360', 1515'-1518'			
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 6395'
Gas: Initial open flow 1416 MCF/d Oil: Initial open flow 103.22 Bbl/d
Final open flow 7883 MCF/d Final open flow 415 Bbl/d
Time of open flow between initial and final tests 439 Hours
Static rock Pressure 2437 psig (surface pressure) after 439 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.



Signature

3-8-12
Date

REGISTERED
ON 03-08-2012
APR 10 2012
WV DEPARTMENT OF ENVIRONMENTAL PROTECTION

Were core samples taken? Yes_____ No_____

Were cuttings caught during drilling? Yes_____ No_____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list_____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please refer to attached perforation and fracture treatment report.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth

Surface:

0'-400' sand and shale	1204'-1218' shale	1880'-2035' shale
400'-410' shale	1218'-1220' coal	2035'-2313' sand/shale/siltstone
410'-430' silty shale	1220'-1245' shale	2313'-2315' Berea
430'-740' shale	1245'-1248' coal	2315'-2753' Fifth Sand
740'-741' coal	1248'-1358' shale	2753'-3230' Shale
741'-945' shale	1358'-1360' coal	3230'-3270' Warren
945'-985' sand	1360'-1515' shale and sand	3270'-4397' Shale
985'-1055' shale	1515'-1518' coal	4397'-4429' Riley
1055'-1057' coal	1518'-1520' shale	4426'-4484' Shale
1057'-1115' shale	1520'-1585' Maxton	4484'-4486' Benson
1115'- 1155' sand	1585'-1605' shale	4486'-6296' Shale
1155'-1159' shale	1605'-1625' Little Lime	6296'-6335' Hamilton
1159'-1160' coal	1625'-1635' Pencil Cave	6335'-6378' Tully
1160'-1202' shale	1635'-1720' Big Lime	6378' Marcellus
1202'-1204' coal	1720'-1881' Big Injun	

RECEIVED
CARTER COUNTY
APR 26 2012
WELLS DIVISION
CARTER COUNTY, MISSISSIPPI

Everett Weese 1107
Perf Spacing for 18 stages

Stage Length: 292'
Num Clusters: 4 to 5
Dist between Perfs: 73'
Perf length: 3'
Stages: 18
Start Depth: 12135'
90 @: 6872'

RECEIVED
COMPTON, CALIF.
APR 30 1968
WVDP-1107-107
Entered 11-28-68

						FT	PSI	PSI	BPM	BPM	bbls	lbs
	Plug Depth	Interval 1	Interval2	Interval 3	Interval 4	Interval 5	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Vol	Total Sand
Stage 1	12135	11899'-11896'	11889'-11886'	11869'-11866'	11849'-11846'	11833'-11830'	7593	7900	80	85	11420	427000
Stage 2	11793	11758'-11755'	11685'-11682'	11612'-11609'	11539'-11536'		7375	7671	81.6	84.2	8580	4178
Stage 3	11501	11466'-11463'	11393'-11390'	11320'-11317'	11247'-11244'		7603	8265	85.1	86.9	8430	427000
Stage 4	11209	11174'-11171'	11101'-11098'	11028'-11025'	10955'-10952'		7615	7650	84.3	85.6	7909	427000
Stage 5	10917	10882'-10879'	10809'-10806'	10736'-10733'	10663'-10660'		7388	8134	82.6	84.8	8325	427000
Stage 6	10625	10590'-10587'	10517'-10514'	10444'-10441'	10371'-10368'		7687	7876	79.6	84.2	8206	427000
Stage 7	10333	10298'-10295'	10225'-10222'	10152'-10149'	10078'-10076'		7360	8102	81.7	83.6	8222	427000
Stage 8	10041	10006'-10003'	9933'-9930'	9860'-9857'	9787'-9784'		7442	8400	84.4	86	8254	427000
Stage 9	9749	9714'-9711'	9641'-9638'	9568'-9565'	9495'-9592'		7295	8140	87.2	88.3	7230	427000
Stage 10	9457	9422'-9419'	9349'-9346'	9276'-9273'	9203'-9200'		7338	8638	83.4	87.4	7753	427000
Stage 11	9165	9130'-9127'	9057'-9054'	8984'-8981'	8911'-8908'		7167	8547	84.6	80.6	8146	427000
Stage 12	8873	8838'-8835'	8765'-8762'	8692'-8689'	8619'-8616'		7070	8624	82.5	84.4	7836	427000
Stage 13	8581	8546'-8543'	8473'-8470'	8400'-8397'	8327'-8324'		7077	8637	82.4	84.7	7888	427000
Stage 14	8289	8254'-8251'	8181'-8178'	8108'-8105'	8035'-8032'		6997	8549	82.5	84.9	8174	427000
Stage 15	7997	7962'-7959'	7889'-7886'	7816'-7813'	7743'-7740'		6861	8077	80.3	82.7	8075	427000
Stage 16	7705	7670'-7667'	7597'-7594'	7524'-7521'	7451'-7448'			8126	79.5	82.8	8151	427000
Stage 17	7413	7378'-7375'	7305'-7302'	7232'-7229'	7159'-7156'		6270	8197	80.9	83.7	8220	427000
Stage 18	7121	7086'-7083'	7013'-7010'	6940'-6937'	6867'-6864'		6736	7908	79.3	82.7	8097	427000

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 8, 2012
API #: 47-095-02022

Farm name: Roger Weese Operator Well No.: Everett Weese 1108

LOCATION: Elevation: 767' Quadrangle: Shirley

District: McElroy County: Tyler
Latitude: 39.424892 Feet South of 39 Deg. 25 Min. 29.61 Sec.
Longitude -80.8099394 Feet West of 80 Deg. 48 Min. 33.82 Sec.

Company: Triad Hunter, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430 Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	80'	80'	
Inspector: Joe Taylor	13 3/8"	441.16'	441.16'	408 cu. ft.
Date Permit Issued: 05/05/2011	9 5/8"	2860.01'	2860.01'	1070 cu. ft.
Date Well Work Commenced: 09/25/2011	5 1/2"	12153.79'	12153.79'	3364.5 cu. ft.
Date Well Work Completed: 12/15/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6366'				
Total Measured Depth (ft): 12170'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 740'-741', 1055'-1057', 1169'-1160', 1202'-1204', 1216'-1220', 1245'-1248' 1358'-1360', 1515'-1518'				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

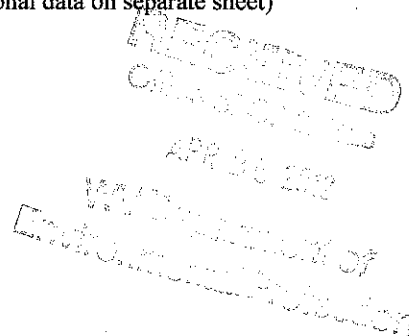
Producing formation Marcellus Shale Pay zone depth (ft) 6401'
Gas: Initial open flow 2153 MCF/d Oil: Initial open flow 49.09 Bbl/d
Final open flow 6362 MCF/d Final open flow 0 Bbl/d
Time of open flow between initial and final tests 498 Hours
Static rock Pressure 2128 psig (surface pressure) after 498 Hours

Second producing formation Pay zone depth (ft)
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d
Final open flow MCF/d Final open flow Bbl/d
Time of open flow between initial and final tests Hours
Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Kenny K...
Signature

3-8-12
Date



Were core samples taken? Yes No Were cuttings caught during drilling? Yes No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please refer to attached perforation and fracture treatment report.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
0'-400' sand and shale	1204'-1218' shale		1880'-2035' shale
400'-410' shale	1218'-1220' coal		2035'-2313' sand/shale/siltstone
410'-430' silty shale	1220'-1245' shale		2313'-2315' Berea
430'-740' shale	1245'-1248' coal		2315'-2753' Fifth Sand
740'-741' coal	1248'-1358' shale		2753'-3230' Shale
741'-945' shale	1358'-1360' coal		3230'-3270' Warren
945'-985' sand	1360'-1515' shale and sand		3270'-4397' Shale
985'-1055' shale	1515'-1518' coal		4397'-4429' Riley
1055'-1057' coal	1518'-1520' shale		4426'-4484' Shale
1057'-1115' shale	1520'-1585' Maxton		4484'-4486' Benson
1115'- 1155' sand	1585'-1605' shale		4486'-6290' Shale
1155'-1159' shale	1605'-1625' Little Lime		6290'-6327' Hamilton
1159'-1160' coal	1625'-1635' Pencil Cave		6327'-6371' Tully
1160'-1202' shale	1635'-1720' Big Lime		6371' Marcellus
1202'-1204' coal	1720'-1881' Big Injun		

RECEIVED
GR - 1111-1111

APR 11 2013

2211

2013-04-11 11:11:11

Everett Weese 1108
Perf Spacing for 16 stages

Stage Length: 296'
 Num Clusters: 4 to 5
 Dist between Perfs: 74'
 Perf length: 3'
 Stages: 16
 Start Depth: 12155'
 90 @: 7031'

RECEIVED
 OIL & GAS
 APR 26 2012
 WILCOX
 ENGINEERING

	Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	FT	PSI	PSI	BPM	BPM	bbls	lbs
Stage 1	12155	12038'-12035'	12012'-12009'	11953'-11950'	11894'-11891'	10835'-11832'	360	7675	8102	80.4	83.5	8343	427000
Stage 2	11795	11760'-11757'	11686'-11683'	11612'-11609'	11538'-11535'		296	7709	8176	84.6	87.8	8306	427000
Stage 3	11499	11464'-11461'	11390'-11387'	11316'-11313'	11242'-11239'		296	7811		82.5		8279	427000
Stage 4	11203	11168'-11165'	11094'-11091'	11020'-11017'	10946'-10943'		296	7813	8173	80	85.2	7861	427000
Stage 5	10907	10872'-10869'	10798'-10795'	10724'-10721'	10650'-10647'		296	7595	8548	81.7	85.5	7758	427000
Stage 6	10611	10576'-10573'	10502'-10499'	10428'-10425'	10354'-10351'		296	7551	8643	80.4	86.6	7945	427000
Stage 7	10315	10280'-10277'	10206'-10203'	10132'-10129'	10058'-10055'		296	7843	8578	73	83.8	8247	427000
Stage 8	10019	9984'-9981'	9910'-9907'	9836'-9833'	9762'-9759'		296	7386	8184	86.8	87.9	8264	427000
Stage 9	9723	9688'-9685'	9614'-9611'	9540'-9537'	9466'-9463'		296	7361	8303	84	87.1	8284	427000
Stage 10	9427	9392'-9389'	9318'-9315'	9244'-9241'	9170'-9167'		296	7341	8645	78.7	83.9	8349	427000
Stage 11	9131	9096'-9093'	9022'-9019'	8948'-8945'	8874'-8871'		296	7208	8528	83	82.9	8161	427000
Stage 12	8835	8800'-8797'	8726'-8723'	8652'-8649'	8578'-8575'		296	7164	8107	77.8	81.2	8089	427000
Stage 13	8539	8504'-8501'	8430'-8427'	8356'-8353'	8282'-8279'		296	7116	8511	79	82.8	8129	427000
Stage 14	8243	8208'-8205'	8134'-8131'	8060'-8057'	7986'-7983'		296	7126	8357	80.9	83.1	8245	427000
Stage 15	7947	7912'-7909'	7838'-7835'	7764'-7761'	7690'-7687'		296	7884	8690	75	80	6899	212375
Stage 16	7651	7616'-7613'	7542'-7539'	7468'-7465'	7394'-7391'		296	7211	8579	74.4	79.1	5128	212375

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 8, 2012
API #: 47-095-02023

Farm name: Roger Weese Operator Well No.: Everett Weese 1109

LOCATION: Elevation: 767' Quadrangle: Shirley

District: McElroy County: Tyler
Latitude: 39.424869 Feet South of 39 Deg. 25 Min. 29.53 Sec.
Longitude -80.809436 Feet West of 80 Deg. 48 Min. 33.97 Sec.

Company: Triad Hunter, LLC

Address: P.O. Box 430	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	80'	80'	
Inspector: Joe Taylor	13 3/8"	440.78'	440.78'	408 cu. ft.
Date Permit Issued: 05/04/2011	9 5/8"	2754.33'	2754.33'	1065 cu.ft.
Date Well Work Commenced: 10/16/211	5 1/2"	12342.84'	12342.84'	3470 cu. ft.
Date Well Work Completed: 12/12/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6369'				
Total Measured Depth (ft): 12342'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 740'-741', 1055'-1057', 1159'-1160', 1202'-1204', 1218'-1220', 1245'-1248'	1358'-1360', 1515'-1518'			
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 6384'
Gas: Initial open flow 606 MCF/d Oil: Initial open flow 28.80 Bbl/d
Final open flow 5918 MCF/d Final open flow 75.55 Bbl/d
Time of open flow between initial and final tests 582 Hours
Static rock Pressure 2507 psig (surface pressure) after 582 Hours

Second producing formation _____ Pay zone depth (ft) _____
Gas: Initial open flow _____ MCF/d Oil: Initial open flow _____ Bbl/d
Final open flow _____ MCF/d Final open flow _____ Bbl/d
Time of open flow between initial and final tests _____ Hours
Static rock Pressure _____ psig (surface pressure) after _____ Hours

RECEIVED
OFFICE OF OIL & GAS

APR 26 2012

DEPARTMENT OF ENVIRONMENTAL PROTECTION

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Ron R
Signature

3-9-12
Date

Were core samples taken? Yes _____ No _____

Were cuttings caught during drilling? Yes _____ No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list _____

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please refer to attached perforation and fracture treatment report.

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

0'-400' sand and shale	1204'-1218' shale	1880'-2035' shale
400'-410' shale	1218'-1220' coal	2035'-2313' sand/shale/siltstone
410'-430' silty shale	1220'-1245' shale	2313'-2315' Berea
430'-740' shale	1245'-1248' coal	2315'-2753' Fifth Sand
740'-741' coal	1248'-1358' shale	2753'-3230' Shale
741'-945' shale	1358'-1360' coal	3230'-3270' Warren
945'-985' sand	1360'-1515' shale and sand	3270'-4397' Shale
985'-1055' shale	1515'-1518' coal	4397'-4429' Riley
1055'-1057' coal	1518'-1520' shale	4426'-4484' Shale
1057'-1115' shale	1520'-1585' Maxton	4484'-4486' Benson
1115'- 1155' sand	1585'-1605' shale	4486'-6286' Shale
1155'-1159' shale	1605'-1625' Little Lime	6286'-6323' Hamilton
1159'-1160' coal	1625'-1635' Pencil Cave	6323'-6355' Tully
1160'-1202' shale	1635'-1720' Big Lime	6355' Marcellus
1202'-1204' coal	1720'-1881' Big Injun	

RECEIVED
GEOLOGICAL
APR 26 2012
WATERLOO
ENVIRONMENTAL ACTION

Everett Weese 1109
Perf Spacing for 18 stages

Stage Length: 308'
Num Clusters: 4 to 5
Dist between Perfs: 77'
Perf length: 3'
Stages: 18
Start Depth: 12342'
90 @: 6916'

RECEIVED
COURT REPORTS
APR 20 2012
WYOMING
ELECTRONIC RECORDS

						FT	PSI	PSI	BPM	BPM	bbls	lbs
	Plug Depth	Interval 1	Interval2	Interval 3	Interval 4	Interval 5	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Vol	Total Sand
Stage 1	12342	12226'-12223'	12210'-12207'	12143'-12140'	12075'-12073'	12008'-12005'	7355	8104	81.4	85.2	9600	427000
Stage 2	11973	11936'-11933'	11859'-11856'	11782'-11779'	11705'-11702'		7743	7803	83.7	86.5	8505	427000
Stage 3	11665	11628'-11625'	11551'-11548'	11474'-11471'	11397'-11394'		7808	8779	82.8	86.2	8318	427000
Stage 4	11355	11320'-11317'	11243'-11240'	11166'-11163'	11089'-11086'		7614		83		8220	427000
Stage 5	11049	11012'-11009'	10935'-10932'	10858'-10855'	10781'-10778'		7728	8004	81.1	84.6	8252	427000
Stage 6	10741	10704'-10701'	10627'-10624'	10550'-10547'	10473'-10470'		7505	8239	81.8	82.2	8252	427000
Stage 7	10433	10396'-10393'	10319'-10316'	10242'-10239'	10165'-10162'		7433	8632	82.6	85.6	8295	427000
Stage 8	10125	10088'-10085'	10011'-10008'	9934'-9931'	9857'-9854'		7420	8359	83.9	86	8860	427000
Stage 9	9817	9780'-9777'	9703'-9700'	9626'-9623'	9549'-9546'		7293	8525	83.3	86.7	8304	427000
Stage 10	9509	9472'-9469'	9395'-9392'	9318'-9315'	9241'-92338'		7275	8480	80.5	84.2	8394	427000
Stage 11	9201	9164'-9161'	9087'-9084'	9010'-9007'	8933'-8930'		7149	8378	80.9	86.9	9844	427000
Stage 12	8893	8856'-8853'	8779'-8776'	8702'-8699'	8625'-8622'		7266	8282	77.8	79.8	8088	427000
Stage 13	8585	8548'-8545'	8471'-8468'	8349'-8391'	8317'-8314'		7244	8330	80.4	83.1	8044	427000
Stage 14	8277	8240'-8237'	8163'-8160'	8086'-8083'	8009'-8006'		6932	8082	82.4	84.9	8158	427000
Stage 15	7969	7932'-7929'	7855'-7852'	7778'-7775'	7701'-7698'		7019	8039	79.6	83.5	8178	427000
Stage 16	7661	7624'-7621'	7547'-7544'	7470'-7467'	7393'-7390'		6980	8123	80.8	82.9	8086	427000
Stage 17	7360	7316'-7313'	7239'-7236'	7162'-7159'	7085'-7082'		6831	8326	81.3	83	8204	427000
Stage 18	7045	7008'-7005'	6931'-6928'	6854'-6851'	6777'-6774'		6455	7646	70.4	70.7	7705	427000

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 04-11-2012

API #: 47-087-03379

97-03779

Farm name: PHILLIPS, CHARLES G. PAULA

Operator Well No.: CHARLES PHILLIPS 100V0341

LOCATION: Elevation: 1700

Quadrangle: BUCKHANNON 7.5

District: MEADE

County: UPSHUR

Latitude: 38 53 49.9 Feet South of Deg.

Min.

Sec.

Longitude 80 14 43.6 Feet West of Deg.

Min.

Sec.

Company: Mountain V Oil and Gas

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 470				
Bridgeport WV 26330	13 3/8		42	SAND IN
Agent: Mike Shaver	9 5/8		346	130 SK
Inspector: Bill Hatfield	7 "		2025	270
Date Permit Issued: 02-24-2011	4 1/2 N 80		7139	150 SK
Date Well Work Commenced: 12-3-2011				
Date Well Work Completed: 12-15-2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7150				
Total Measured Depth (ft): 7150				
Fresh Water Depth (ft.):	644/10			
Salt Water Depth (ft.):	1350			
Is coal being mined in area (N/Y)?	N			
Coal Depths (ft.):	N/A			
Void(s) encountered (N/Y) Depth(s)	N			

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation MARCELLUS Pay zone depth (ft) 7033 - 7139

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow 500 MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure 2650 psig (surface pressure) after Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

9-10-12
Date

Were core samples taken? Yes No ☒ Were cuttings caught during drilling? Yes ☒ No

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list ELECTRICAL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERFS 7090 - 7130 120 HOLES 3 SHOT P/FOOT

SLICK WATER FRACK 15099 BBL H2O, 15645 BBL SLURRY 2017 SK 80/100, 3015 SK 40/70, AVG PRESURE 5246 AVG RATE 76.2

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Top Depth / Bottom Depth
Surface:

sand & shale	GL - 1444
GROUND EL	1700
GREENBRIER BIG LIME	1445 - 1715
INJUN	1445 - 2227
GORDON	2227 - 2357
5 TH SAND	2397 - 2467
3 RD RILEY	3637 - 3678
BENSON	4022 - 4081
GENESEO SHALE	6879 - 6914
TULLY LS	6914 - 6957
HAMILTON SHALE	6957 - 7033
UPPER MARCELLUS	7033 - 7073
PURCELL LS	7073 - 7076
LOWER MARCELLUS	7076 - 7139
ONONDAGA	7139 - 7150

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 04-10-2012
API #: 47-097-03808

Farm name: CUTRIGHT, BOYD Operator Well No.: ANNA CUTRIGHT 2 WV0426

LOCATION: Elevation: 2072 Quadrangle: ALTON 7.5

District: MEADE County: UPSHUR
Latitude: 38.49 32.8 Feet South of Deg. Min. Sec.
Longitude 80.12 33.1 Feet West of Deg. Min. Sec.

Company: MOUNTAIN V OIL and GAS

Address: P.O.BOX BRIDGEPORT WV 26330	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
	13 3/8		40	SAND IN
Agent: Mike Shaver	9 5/8		252	87 SK
Inspector: Bill Hatfield	7 "		1732	240 SK
Date Permit Issued: 09-08-2011	4 1/2 N 80		7315	150 SK10-23-2011
Date Well Work Commenced: 12-20-2011				
Date Well Work Completed: 01-05-2012				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7320				
Total Measured Depth (ft): 7320				
Fresh Water Depth (ft.): 163				
Salt Water Depth (ft.): 1260				
Is coal being mined in area (N/Y)?				
Coal Depths (ft.): 216				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation MARCELLUS Pay zone depth (ft) 7203 - 7308

Gas: Initial open flow 380,000 MCF/d Oil: Initial open flow 1200 Bbl/d

Final open flow 250,000 MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests 24 Hours

Static rock Pressure 2000 psig (surface pressure) after 24 Hours

Second producing formation Pay zone depth (ft)

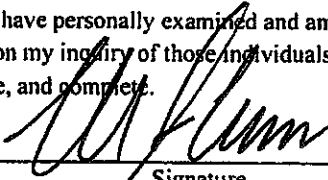
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

4-16-12
Date

Were core samples taken? Yes _____ No ☒

Were cuttings caught during drilling? Yes ☒ No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list ELECTRICAL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

PERFS 7296 -729024 HOLES, 7288 - 7282 24 HOLES, 7246 4 HOLES, 7276 - 7268 16 HOLES

7264.5 - 7259 22 HOLES

15927 BBL H2O, 16617 SLURRY, 2000 SK 80/100, 4014 40/70

AVG PRESURE 4487 AVG RATE 76.8

ISIP 2193

RECEIVED

Office of Oil & Gas

APR 17 2012

Plug Back Details Including Plug Type and Depth(s):

NY Department of
Environmental Protection

Formations Encountered:

Top Depth

/

Bottom Depth

Surface:

GROUND EL 2072

GREENBRIER BIG LIME 1354 - 1580

INJUN 1580 - 1499

BENSON 3870 - 3899

ALEXANDER 4090 - 4370

ELK 4370 - 6632

GENESEO 7060 - 7096

TULLY 7096 - 7134

HAMILTON SHALE 7134 - 7203

UPPER MARCELLUS 7203 - 7238

PURCELL 7238 - 7242

LOWER MARCELLUS 7242- 7308

ONONDAGA 7308 - 7320

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 04/12/2012
API #: 47097-03812

Farm name: HAMNER, JAMES T. & JANET G.

Operator Well No.: HAMNER CHURCH 1H WV0428

LOCATION: Elevation: 1894

Quadrangle: ALTON 7.5

District: MEADE

County: UPSHUR

Latitude: 38 50 57.333 Feet South of Deg. Min. Sec.
Longitude 80 12 48.325 Feet West of Deg. Min. Sec.

Company: MOUNTAIN V OIL and GAS

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 470				
BRIDGEPORT WV. 26330	20"		42'	SAND IN
Agent: Mike Shaver	16		253	165 SK
Inspector: Bill Hatfield	11 3/4		1718	650 SK
Date Permit Issued: 08-30-2011	8 5/8		4198	764 SK
Date Well Work Commenced: 11-05-2011	5 1/2		10294	805
Date Well Work Completed: 02-11-12				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7188				
Total Measured Depth (ft): 10212				
Fresh Water Depth (ft.): 51, 135, 144				
Salt Water Depth (ft.): 1160				
Is coal being mined in area (N/Y)? NO				
Coal Depths (ft.): 70				
Void(s) encountered (N/Y) Depth(s)				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation MARCELLUS Pay zone depth (ft) 7170 - 7276

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow 950 MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure 2600 psig (surface pressure) after 24 Hours

Second producing formation Pay zone depth (ft)

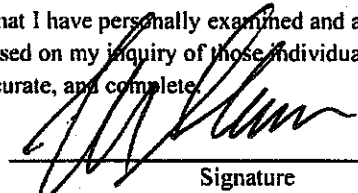
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

7-16-12
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes X No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list GEOPHYSICAL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

SEE ATTACHED SHEET

RECEIVED
Office of Oil & Gas

APR 17 2012

NY Department of
Environmental Protection

Plug Back Details Including Plug Type and Depth(s):

KICK PLUG CEMENT 7286 - 5300

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
GROUND EL	1894		
BIG LIME	1283 - 1354		
30 FT	1885 - 1915		
5 TH SAND	2082 - 2105		
BENSON	3848 - 3870		
ELK	4370 - 6632		
GENESEO	7024 - 7060		
TULLY LS	7060 - 7100		
HAMILTON SHALE	7100 - 7170		
UPPER MARCELLUS	7170 - 7212		
PURCELL	7212 - 7216		
LOWER MARCELLUS	7216 - 7276		
ONONDAGA	7276 - 7286		

Mountain V Oil & Gas Hamner Church 1H WV0428 47-097-03812

STAGE # 1 PERFS 10249 – 10247 12 SHOTS, 10159 – 10157 12 SHOTS, 10069 – 10067 12 SHOTS, 9978 – 9976 12 SHOTS

RECEIVED
Office of Oil & Gas

SLICK WATER AVG PSI 6947, AVG RATE 81.1, ISIP 3843,
H2O 7361 BBL, SLURRY 7753, 252SK 80/100, 1997 SK 40/70

APR 17 2012

STAGE # 2 PERFS 9906 – 9904 12 SHOTS, 9816 – 9814 12 SHOTS, 9726 – 9724 12 SHOTS, 9635 – 9633 12 SHOTS

WV Department of
Environmental Protection

SLICK WATER AVG PSI 6682, AVG RATE 79, ISIP 4144
H2O 7278 BBL, SLURRY 7526, 251 SK 80/100, 2029 SK 40/70

STAGE # 3 PERFS 9563 – 9561 12 SHOTS, 9473 – 9471 12 SHOTS, 9383 – 9381 12 SHOTS 9292 – 9290 12 SHOTS

SLICK WATER AVG PSI 6813, AVG RATE 83.8, ISIP 4001
H2O 7412 BBL, SLURRY 7830, 252 SK 80/100, 2030 SK 40/70

STAGE # 4 PERFS 9220 – 9218 12 SHOTS, 9130 – 9128 12 SHOTS 9040 – 9038 12 SHOTS 8949 – 8947 12 SHOTS

SLICK WATER AVG PSI 6729, AVG RATE 83, ISIP 4023
H2O 7440 BBL, SLURRY 7855, 250 SK 80/100, 2047 SK 40/70

STAGE # 5 PERFS 8877 – 8875 12 SHOTS, 8787 – 8785 12 SHOTS 8697 – 8695 12 SHOTS 8606 – 8604 12 SHOTS

SLICK WATER AVG PSI 6501, AVG RATE 84.23, ISIP 4028
H2O 7367 BBL, SLURRY 7799, 250 SK 80/100, 1985 SK 40/70

STAGE # 6 PERFS 8534 – 8532 12 SHOTS, 8444 – 8442 12 SHOTS, 8354 – 8352 12 SHOTS, 8263 – 8261 12 SHOTS

SLICK WATER AVG PSI 6430, AVG RATE 84.5, ISIP 4014
H2O 7335 BBL, SLURRY 7641, 250 SK 80/100, 2024 SK 40/70

STAGE # 7 PERFS 8191 – 8189 12 SHOTS 8101 – 8099 12 SHOTS 8011 – 8009 12 SHOTS 7920 – 7918 12 SHOTS

SLICK WATER AVG PSI 6408, AVG RATE 87.3, ISIP 4014
H2O 7370 BBL, SLURRY 7676, 251 SK 80/100, 2011 SK 40/70

STAGE # 8 PERFS 7848 – 7846 12 SHOTS, 7759 – 7757 12 SHOTS, 7670 – 7668 12 SHOTS, 7580 – 7578 12 SHOTS

SLICK WATER AVG PSI 6114, AVG RATE 85, ISIP 3827
H2O 7036 BBL, SLURRY 7312, 250 SK 80/100, 1780 SK 40/70

RECEIVED
Office of Oil & Gas

APR 17 2012

NY / Department of
Environmental Protection

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 03/23/12
API #: 47-103-02579

Farm name: Jolliffe, Joe Operator Well No.: Joe Jolliffe Unit 1 1H

LOCATION: Elevation: 1,358' Quadrangle: Littleton 7.5'

District: Center County: Wetzel
Latitude: 7,200' Feet South of 39 Deg. 40' Min. 00.0 Sec.
Longitude 4,105' Feet West of 80 Deg. 32' Min. 30.0 Sec.

Company: Grenadier Energy Partners, LLC

Address: CT Corporation 707 Virginia Street East 15th Floor Charleston, WV 25301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: Dianna Stamper	24"	40'	40'	Grouted In
Inspector: Derek Haught	16"	425'	425'	445 cu.ft (CTS)
Date Permit Issued: 10/01/2010	11-3/4"	1629'	1629'	915 cu.ft (CTS)
Date Well Work Commenced: 06/01/11	8-5/8"	2706'	2706'	716 cu.ft (CTS)
Date Well Work Completed: 12/07/11	5-1/2"	11,040'	11,040'	2781 cu.ft (CTS)
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7501'				
Total Measured Depth (ft): 11,099'				
Fresh Water Depth (ft.): Est. 290'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): 631'-636'				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7646' - 10838' MD (7501' TVD)

Gas: Initial open flow 6928 MCF/d Oil: Initial open flow -- Bbl/d

Final open flow -- MCF/d Final open flow -- Bbl/d

Time of open flow between initial and final tests -- Hours

Static rock Pressure 4400 psig (surface pressure) after 168 Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Bryan Haulcy
Signature

3/23/12
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes X No _____
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - GR

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: Total Perforated Interval (7644' - 10,838' MD)
Fluid: 89,461 bbl Slickwater pumped in 9 Stages
Sand: 1,797,814 lbs 100 mesh sand, 1,886,210 lbs 40/70 sand

Plug Back Details Including Plug Type and Depth(s): N/A

Formations Encountered:	Top Depth	/	Bottom Depth
<u>Surface:</u>			

See Attached Sheet

Formation/Lithology	From	To
Sand & Shale	47	60
Red Rock	60	70
Sand & Shale	70	120
Red Rock	120	135
White Sand	135	148
Sand & Shale	148	155
Red Rock	155	168
Sand & Shale	168	240
Red Rock	240	279
Shale	279	500
Sand & Shale	500	631
Coal	631	636
Sand & Shale	636	800
Red Rock & Shale	800	850
Sand & Shale	850	1102
Coal	1102	1107
Sand & Shale	1107	1115
Sand	1115	1137
Sand & Shale	1137	1191
Red Rock	1191	1352
Sand & Shale	1352	1360
Red Rock & Shale	1360	1386
Red Rock	1386	1415
Red Rock Sand & Shale	1415	1438
Sand & Shale	1438	1550
Red Rock	1550	1581
Sand & Shale	1581	1738
Sand	1738	1801
Sand & Shale	1801	1864
Sand	1864	1964
Freeport Coal	1964	1976
Sand & Shale	1976	2063
Sand	2063	2240
Sand & Shale	2240	2262
Salt and Sand	2262	2300
Lime	2300	2365
Sand & Shale	2365	2369
Big Injun	2369	2400
Sand & Shale	2400	3135
Gordon	3135	3145
Sand	3145	3180
Sand & Shale	3180	6956
Sonya Shale	6956	7190
Genesee Shale	7190	7275
Geneseo Shale	7275	7301
Tully Lime	7301	7305
Hamilton	7305	7423
Marcellus Shale	7423	N/A

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: April 11, 2012
API #: 47-103-02599

REVISED FOR
COMPLETION

Farm name: Nice, John E. et al Operator Well No.: Nice Unit A #1H

LOCATION: Elevation: 1,344' Quadrangle: New Martinsville

District: Magnolia County: Wetzel
Latitude: 14,200 Feet South of 39 Deg. 42 Min. 30 Sec.
Longitude: 9,890 Feet West of 80 Deg. 47 Min. 30 Sec.

Company: Stone Energy Corporation

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
6000 Hampton Center, Suite B Morgantown, WV 26505	20"	49'	49'	GTS
Agent: Tim McGregor	13.375"	1,135'	1,135'	1,144 - CTS
Inspector: Derek Haught	9.625"	2,414'	2,414'	1,019 - CTS
Date Permit Issued: 9/21/2010 & 11/17/2010	5.5"		13,069'	3,090
Date Well Work Commenced: 11/8/2010	2.375"		6,917'	
Date Well Work Completed: 11/11/2011				
Verbal Plugging:	Well TD at 6,624' TVD Logged and Plugged Back			
Date Permission granted on:	Kicked Well Off - See Details on Page 2			
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6,539				
Total Measured Depth (ft): 13,069				
Fresh Water Depth (ft.): 83				
Salt Water Depth (ft.): 1,791				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 1,022				
Void(s) encountered (N/Y) Depth(s) N/A				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Pay zone depth (ft) 7,039' to 12,954'

Gas: Initial open flow 1,200 MCF/d Oil: Initial open flow 0 Bbl/d

Final open flow 3,290 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 64 Hours

Static rock Pressure 2,950 psig (surface pressure) after 101 Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

4/24/2012
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes X No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Triple Combo, MWD Gamma Ray, Mud Log, and CBL

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforated 19 intervals from 12640' to 7039'. Performed 19 individual stages of slick water stimulation using 7222068 gals (81.1615%) fresh water, 52539 gals (0.7275%) 15% HCl, 145853 gals (2.0195%) 10 lb Guar Gel, 1145588 gals (15.8623%) 20 lb Guar Gel, 107 gals (0.0015%) Corrosion Inhibitor, 1566 gals (0.0217%) Bio-Cide, 5023 gals (0.0696%) Friction Reducer, 540 gals (0.0075%) Scale Inhibitor, 8 gals (0.0001%) Anti-Foam, 4955 gals (0.0686%) Surfactant, 1206 lbs (0.0020%) Gel, 21420 (0.0356%) Polymer Gel, 347 lbs (0.0006%) Iron Stabilizer, 1564 gal (0.0217%) Clay Stabilizer, 251 lbs (0.0004%) Soda Ash, 818560 lbs 80/100 Sand, and 5368692 lbs 40/70 Sand. AvBDP = 5864 psi, AvTP = 6946 psi, AvMTP = 9272 psi, AvSIP = 4561, AvRate = 80.79 bpm
Plug Back Details Including Plug Type and Depth(s): Well was plugged back for kick off with 3% Gel from 6624' to 6606', Class H cement plug (16 ppg) from 6606' to 5030'.

Formations Encountered:	Top Depth	/	Bottom Depth
Surface:			

See attached sheet for formations encountered and their depths.

Nice et al Unit A #1H
 API 47-103-02599
 Stone Energy Corporation
 Pilot Hole

	Top (ft TVD)	Bottom (ft TVD)
Sandstone & Shale	Surface	1022
Pittsburgh Coal	1022	1027
Sandstone & Shale	1027	1992
Little Lime	1992	2034
Sandstone & Shale	2034	2097
Big Lime	2097	2291
Big Injun	2291	2334
Sandstone & Shale	2334	2701
Berea sandstone	2701	2714
Shale	2714	2947
Gordon	2947	2995
Undiff Devonian Shale	2995	5940
Rhinestreet	5940	6288
Cashaqua	6288	6402
Middlesex	6402	6418
West River	6418	6486
Geneseo	6486	6506
Tully limestone	6505	6538
Hamilton	6538	6564
Marcellus	6564	6622
Onondaga	6622	6626
Driller depth	6624	
Logger depth	6626	

Depths Taken From Electric Log For Pilot Hole

Nice et al Unit A #1H
 API 47-103-02599
 Stone Energy Corporation

	Horizontal			Bottom (ft	
	Top (ft TVD)	Top (ft MD)	(ft	TVD)	MD)
Sandstone & Shale	Surface		*	1022	
Pittsburgh Coal	1022		*	1027	
Sandstone & Shale	1027		*	1992	
Little Lime	1992		*	2034	
Sandstone & Shale	2034		*	2097	
Big Lime	2097		*	2291	
Big Injun	2291		*	2334	
Sandstone & Shale	2334		*	2701	
Berea sandstone	2701		*	2714	
Shale	2714		*	2947	
Gordon	2947		*	2995	
Undiff Devonian Shale	2995		*	5945	5946
Rhinestreet	5945	5946	~	6274	6290
Cashaqua	6274	6290	~	6406	6450
Middlesex	6406	6450	~	6419	6470
West River	6419	6470	~	6486	6590
Geneseo	6486	6590	~	6507	6642
Tully limestone	6507	6642	~	6534	6744
Hamilton	6534	6744	~	6562	6830
Marcellus	6562	6830	~	6539	13069
TD	6539	13069			

* From Pilot Hole Log

~ From MWD Gamma Log

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 8, 2012
API #: 47-103-02626

Farm name: West Virginia Division of Natural Resources

Operator Well No.: WVDNR 1103

LOCATION: Elevation: 805'

Quadrangle: Center Point

District: Grant

County: Wetzel

Latitude: 39.500833 Feet South of 39 Deg. 30 Min. 33.41 Sec.

Longitude -80.617922 Feet West of 80 Deg. 38 Min. 88.21 Sec.

Company: Triad Hunter, LLC

Address: P.O. Box 430 Reno, Ohio 45773	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: Kimberly Arnold	20"	44'	44'	
Inspector: David Scranage	13 3/8"	795.55'	795.55'	732 cu. ft.
Date Permit Issued: 01/28/2011	9 5/8"	3117.5'	3117.5'	790.6 cu. ft.
Date Well Work Commenced: 03/21/2011	5 1/2"	12288.38'	12288.38'	2772 cu. ft.
Date Well Work Completed: 09/18/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7023'				
Total Measured Depth (ft): 12335'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 225'-340', 380'-394', 590'-598'				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7023'

Gas: Initial open flow 2350 MCF/d Oil: Initial open flow 7 Bbl/d

Final open flow 5765 MCF/d Final open flow 0 Bbl/d

Time of open flow between initial and final tests 112 Hours

Static rock Pressure 2799 psig (surface pressure) after 112 Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

RECEIVED
OFFICE OF OIL AND GAS
APR 20 2012
WEST VIRGINIA DEPT OF ENVIRONMENTAL PROTECTION

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Ken Ro
Signature

3-8-12
Date

WVDNR 1103
Perf Spacing for 16 stages

Stage Length: 307
Num Clusters: 4 o 5
Dist between Perfs: 77'
Perf length: 3'
Stages: 16
Start Depth: 12280
90 @: 7479'

RECEIVED
OCT 10 2014
APR 28 2015
WVDNR 1103
Environmental Services

						FT	PSI	PSI	BPM	BPM	bbis	lbs
	Plug Depth	Interval 1	Interval 2	Interval 3	Interval 4	Interval 5	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Vol	Total Sand
Stage 1	12280	12260'-12257'	12198'-12195'	12136'-12133'	12074'-12071'	12013'-12010'	7420	7956	84.5	85.2	10067	427200
Stage 2	11955	11936'-11933'	11859'-11856'	11782'-11779'	11705'-11702'		7388	7604	85.4	86.8	10210	427000
Stage 3	11660	11629'-11626'	11552'-11549'	11475'-11472'	11398'-11395'		7268	7844	85	86.8	10106	427000
Stage 4	11359	11322'-11319'	11245'-11242'	11168'-11165'	11091'-11088'		6817	7782	86.2	87.6	10089	427000
Stage 5	11052	11015'-11012'	10938'-10935'	10861'-10858'	10784'-10781'		6872	7691	85.4	87.5	10154	427000
Stage 6	10745	10708'-10705'	10631'-10628'	10544'-10551'	10477'-10474'		7020	7880	84.3	85.5	10171	427000
Stage 7	10438	10401'-10398'	10324'-10321'	10247'-10244'	10170'-10167'		6938	7386	83.8	85.8	10106	427000
Stage 8	10131	10094'-10091'	10017'-10014'	9940'-9937'	9863'-9860'		7050	7429	86.4	87.7	10124	427000
Stage 9	9824	9787'-9784'	9710'-9707'	9633'-9630'	9556'-9553'		6953	7331	83.5	86.8	9924	427000
Stage 10	9517	9480'-9477'	9403'-9400'	9326'-9323'	9249'-9246'		7224	7412	85.2	86.3	10133	427000
Stage 11	9210	9173'-9170'	9096'-9093'	9019'-9016'	8942'-8939'		7267	7549	84.3	87.2	9528	427000
Stage 12	8903	8866'-8863'	8789'-8786'	8712'-8709'	8635'-8632'		7039	7459	84.4	85.7	9583	427000
Stage 13	8596	8559'-8556'	8482'-8479'	8405'-8402'	8328'-8325'		7299	7990	83.2	86.5	9597	427000
Stage 14	8292	8252'-8249'	8175'-8172'	8098'-8095'	8021'-8018'		7013		83.1		9654	427000
Stage 15	7982	7945'-7942'	7858'-7855'	7791'-7788'	7714'-7711'		7162	7467	81.8	84.3	9638	427000
Stage 16	7667	7638'-7635'	7561'-7558'	7484'-7481'	7407'-7404'		6888	7173	83.9	86.1	9893	427000

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: March 8, 2012
API #: 47-103-02627

Farm name: West Virginia Division of Natural Resources

Operator Well No.: WVDNR 1104

LOCATION: Elevation: 805'

Quadrangle: Center Point

District: Grant

County: Wetzel

Latitude: 39.50923 Feet South of 39 Deg. 30 Min. 33.24 Sec.
Longitude -80.63561 Feet West of 80 Deg. 38 Min. 88.22 Sec.

Company: Triad Hunter, LLC

Address:	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
P.O. Box 430 Reno, Ohio 45773				
Agent: Kimberly Arnold	20"	44'	44'	
Inspector: David Scranage	13 3/8"	795.55'	795.55'	732 cu. ft.
Date Permit Issued: 01/28/2011	9 5/8"	3116.19'	3116.19'	790.6 cu. ft.
Date Well Work Commenced: 03/23/2011	5 1/2"	11792.68'	11792.68'	3257.28 cu. ft.
Date Well Work Completed: 09/19/2011				
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 6980'				
Total Measured Depth (ft): 12663'				
Fresh Water Depth (ft.):				
Salt Water Depth (ft.):				
Is coal being mined in area (N/Y)? No				
Coal Depths (ft.): 225'-340', 380'-394', 590'-598'				
Void(s) encountered (N/Y) Depth(s) None				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7023'

Gas: Initial open flow 2874 MCF/d Oil: Initial open flow 0.5 Bbl/d

Final open flow 3941 MCF/d Final open flow 19.1 Bbl/d

Time of open flow between initial and final tests 168 Hours

Static rock Pressure 2463 psig (surface pressure) after 168 Hours

Second producing formation Pay zone depth (ft)

Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.

Ray Ray
Signature

3-8-12
Date

RECEIVED
OFFICE OF OIL AND GAS
APR 26 2012
WEST VIRGINIA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

Were core samples taken? Yes No Were cuttings caught during drilling? Yes^X No
Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Please refer to attached perforation and fracture treatment report

Plug Back Details Including Plug Type and Depth(s):

Formations Encountered: Surface:	Top Depth	/	Bottom Depth
0'-35' sand	520'-580' shale		2465'-2470' Berea
35'-50' shale	580'-590' sand		2470'-2650' shale
50'-65' sand	590'-598' shale		2650'-2710' Gordon
65'-185' shale	598'-601' coal		2710'-2805' shale
185'-225' sand	601'-700' shale		2805'-2815' Fourth Sd
225'-340' shale	700'-760' sand		2815'-2900' Shale
340'-343' coal	760'-960' shale		2900'-2905' Fifth Sd
343'-355' shale	960'-1600' sand and shale		2905'-6780' Devonian Shale
355'-380' sand	1600'-1655' sand		6780'-6804' Hamilton
380'-394' shale	1655'-1795' shale		6804'-6906' Tully
394'-395' coal	1795'-1810' Little Lime		6906' Marcellus
395'-415' shale	1810'-1835' Pencil Cave		
415'-430' sand	1835'-1885' Big Lime		
430'-460' shale	1885'-2085' Big Injun		
460'-520' sand	2085'-2465' shale		

RECEIVED
APR 26 2017
WATER DIVISION
Environmental Section

WVDNR 1104
Perf Spacing for 16 stages

Stage Length: 266'
Num Clusters: 4 to 5
Dist between Perfs: 67'
Perf length: 3'
Stages: 16
Start Depth: 11875
90 @: 8021'

RECEIVED
Geological Data
APR 26 2017
WVDNR, Division of
Environmental Protection

						FT	PSI	PSI	BPM	BPM	bbls	lbs
	Plug Depth	Interval 1	Interval2	Interval 3	Interval 4	Interval 5	Avg Treating Pressure	Max Pressure	Avg Rate	Max Rate	Fluid Vol	Total Sand
Stage 1	11875	11774'-11771'	11769'-11766'	11763'-11760'	11758'-11755'	11752'-11749'	8804	9150	58.5	63	4995	3400
Stage 2	11718	11687'-11684'	11620'-11617'	11553'-11550'	11486'-11483'		7477	7855	82.1	83	10089	427000
Stage 3	11448	11421'-11418'	11354'-11351'	11287'-11284'	11220'-11217'		7777	8196	87.5	83.7	10178	427000
Stage 4	11186	11155'-11152'	11088'-11085'	11021'-11018'	10954'-10951'		7882	8642	72.8	80.1	13121	427000
Stage 5	10920	10889'-10886'	10822'-10819'	10755'-10752'	10688'-10685'		7626	7923	81.2	83.5	10132	427000
Stage 6	10654	10623'-10620'	10556'-10556'	10489'-10486'	10422'-10419'		7222	7923	83.5	87	10320	427000
Stage 7	10388	10357'-10354'	10290'-10287'	10223'-10220'	10156'-10153'		7269	8051	82.5	85.4	10160	427000
Stage 8	10122	10108'-10105'	10024'-10021'	9957'-9954'	9880'-9877'		8305	8494	64.7	79.4	7487	2000
Stage 9	9846	9825'-9822'	9758'-9755'	9691'-9688'	9624'-9621'		7514	8114	86	88.55	10077	427000
Stage 10	9590	9559'-9556'	9492'-9489'	9425'-9422'	9358'-9355'		7689	7961	85.4	86.7	9933	427000
Stage 11	9328	9293'-9290'	9226'-9223'	9159'-9156'	9092'-9089'		8303	8959	80.4	83.4	11096	427000
Stage 12	9058	9027'-9024'	8960'-8957'	8893'-8890'	8826'-8823'		7525	8123	84.9	86.9	9567	427000
Stage 13	8792	8761'-8758'	8694'-8691'	8627'-8624'	8560'-8557'		7416	7912	85.6	86	9599	427000
Stage 14	8523	8495'-8492'	8428'-8425'	8361'-8358'	8294'-8291'		7704	8377	83.7	86.8	9585	427000
Stage 15	8260	8229'-8226'	8162'-8159'	8095'-8092'	8028'-8025'		7034	7207	86	87	9598	427000
Stage 16	7988	7963'-7960'	7896'-7893'	7829'-7826'	7762'-7759'		6330	7351	85.5	85.7	9782	427000

State of West Virginia
Department of Environmental Protection
Office of Oil and Gas
Well Operator's Report of Well Work

DATE: 03/29/12
API #: 47-103-02683

Farm name: Henderson, Howard M. Operator Well No.: North Henderson Unit 1H

LOCATION: Elevation: 1,356' Quadrangle: Littleton 7.5'

District: Center County: Wetzel
Latitude: 5.435' Feet South of 39 Deg. 42 Min. 30.0 Sec.
Longitude 10.241' Feet West of 80 Deg. 32' Min. 30.0 Sec.

Company: Grenadier Energy Partners, LLC

CT Corporation 707 Virginia Street East 15th Floor Charleston, WV 25301	Casing & Tubing	Used in drilling	Left in well	Cement fill up Cu. Ft.
Agent: Dianna Stamper	24"	40'	40'	Grouted In
Inspector: Derek Haught	16"	429'	429'	432 cu.ft (CTS)
Date Permit Issued: 06/27/2011	11-3/4"	1647'	1647'	1129 cu.ft (CTS)
Date Well Work Commenced: 09/14/2011	8-5/8"	2722'	2722'	738 cu.ft (CTS)
Date Well Work Completed: 12/19/2011	5-1/2"	13,110'	13,110'	2336 cu.ft (CTS)
Verbal Plugging:				
Date Permission granted on:				
Rotary <input checked="" type="checkbox"/> Cable <input type="checkbox"/> Rig <input type="checkbox"/>				
Total Vertical Depth (ft): 7531'				
Total Measured Depth (ft): 13,140'				
Fresh Water Depth (ft.): Est. 285'				
Salt Water Depth (ft.): N/A				
Is coal being mined in area (N/Y)? N				
Coal Depths (ft.): N/A				
Void(s) encountered (N/Y) Depth(s) N				

OPEN FLOW DATA (If more than two producing formations please include additional data on separate sheet)

Producing formation Marcellus Shale Pay zone depth (ft) 7548' - 13044' MD (7531' TVD)

Gas: Initial open flow 11687 MCF/d Oil: Initial open flow -- Bbl/d

Final open flow -- MCF/d Final open flow -- Bbl/d

Time of open flow between initial and final tests -- Hours

Static rock Pressure 4450 psig (surface pressure) after 168 Hours

Second producing formation Pay zone depth (ft)

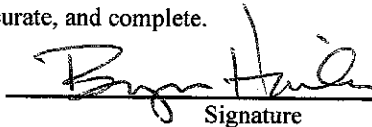
Gas: Initial open flow MCF/d Oil: Initial open flow Bbl/d

Final open flow MCF/d Final open flow Bbl/d

Time of open flow between initial and final tests Hours

Static rock Pressure psig (surface pressure) after Hours

I certify under penalty of law that I have personally examined and am familiar with the information submitted on this document and all the attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information I believe that the information is true, accurate, and complete.


Signature

4/2/12
Date

Were core samples taken? Yes _____ No X Were cuttings caught during drilling? Yes X No _____

Were Electrical, Mechanical or Geophysical logs recorded on this well? If yes, please list Yes - Gamma Ray

NOTE: IN THE AREA BELOW PUT THE FOLLOWING: 1). DETAILS OF PERFORATED INTERVALS, FRACTURING OR STIMULATING, PHYSICAL CHANGE, ETC. 2). THE WELL LOG WHICH IS A SYSTEMATIC DETAILED GEOLOGICAL RECORD OF THE TOPS AND BOTTOMS OF ALL FORMATIONS, INCLUDING COAL ENCOUNTERED BY THE WELLBORE FROM SURFACE TO TOTAL DEPTH.

Perforated Intervals, Fracturing, or Stimulating:

Perforations: Total Perforated Interval (7548' - 13044' MD)

Fluid: 149,128 bbl Slickwater pumped in 15 Stages

Sand: 3,275,101 lbs 100 mesh sand, 3,570,053 lbs 40/70 sand

Plug Back Details Including Plug Type and Depth(s): N/A

<u>Formations Encountered:</u>	<u>Top Depth</u>	<u>/</u>	<u>Bottom Depth</u>
--------------------------------	------------------	----------	---------------------

Surface:

See Attached Sheet

North Henderson Unit 1H

Formation/Lithology	From	To
Shale	47	80
Red Rock	80	120
Sand & Shale	120	130
Red Rock	130	206
Sand & Shale	206	268
Red Rock	268	285
Sand & Shale	285	405
Red Rock	405	420
Sand & Shale	420	1080
Shale	1080	1095
Sand	1095	1115
Sand & Shale	1115	1230
Sand	1230	1253
Sand & Shale	1253	1455
Lime	1455	1463
Red Rock	1463	1515
Sand	1515	1554
Shale	1554	1720
Sand	1720	1782
Sand & Shale	1782	1803
Sand	1803	2130
Sand & Shale	2130	2323
Lime	2323	2358
Big Lime	2358	2460
Injun	2460	2611
Sand & Shale	2611	3228
Gordon	3228	3265
Sand & Shale	3265	7265
Genesee Shale	7265	7318
Geneseo Shale	7318	7342
Tully Lime	7342	7346
Hamilton	7346	7466
Marcellus Shale	7466	N/A